

MONTHLY NOTICES

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Supplementary Notice.

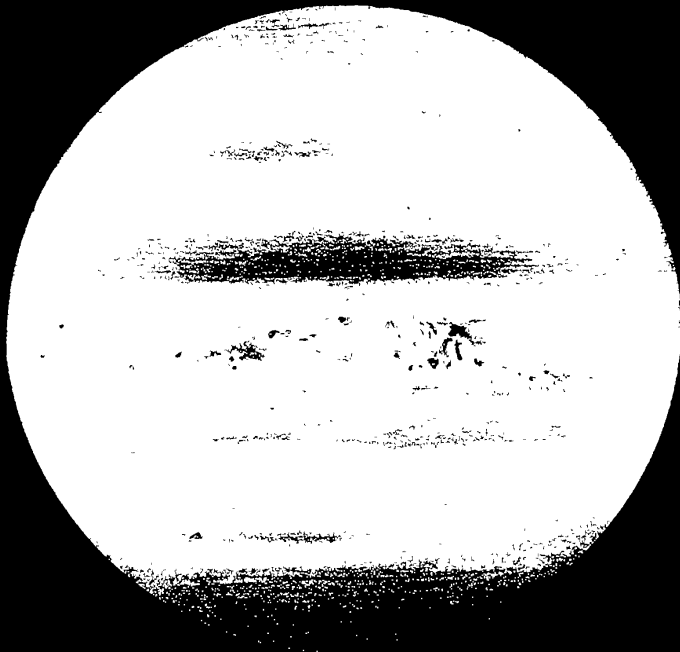
No. 9.

On some Observations of Jupiter in 1871-72.

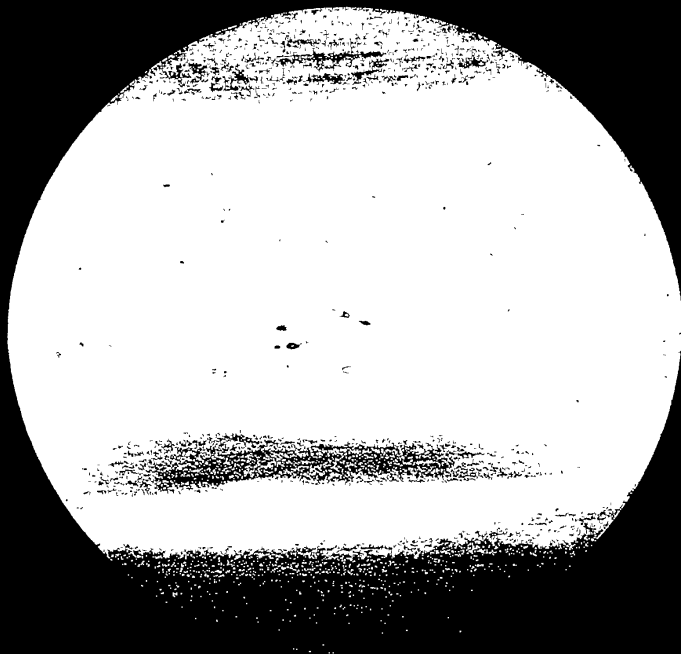
By John Browning.

From the drawings of *Jupiter* which I have made since December 1871, I have selected only four to bring before the notice of the Society : these drawings were made on the following dates : No. 1, on Dec. 4th, 1871, at midnight ; No. 2, on Jan. 14th, 1872, 7 P.M. ; No. 3, on March 3rd, 1872, at 8.45 P.M. ; No. 4, on May 5th, 1872, at 9.15 P.M.* Many of the drawings made during the winter months are somewhat deficient in detail as compared with those made recently ; but this, I do not doubt, is principally the result of the bad definition due to very unsteady air, as the first drawing mentioned, that made on Dec. 4th, contains nearly as much detail as those made recently ; the markings are, however, so complex that they defy all attempts to draw them correctly. I had some tolerably good views of the planet earlier than December last year ; the tawny colour of the equatoreal belt seemed to me stronger than I had previously seen it ; as, however, a well-known observer, who had previously made colour observations of *Jupiter*, did not agree with me, I preferred making a continuous series of observations before giving a decided opinion on the subject. Subsequent observations have convinced me that my conclusion was correct, and I have since been fortified in this opinion by the statement of our late President, Mr. Lassell. On every occasion when the definition has been good, I have been able to make out light markings flecking the

* The four drawings were exhibited at the meeting in June. Nos. 2 and 4 are reproduced on a reduced scale in the accompanying illustrations.



JAN 14 7 P.M. 1872.



MAY 5 11 15 P.M. 1872.

JOHN BROWNING, DEL.

tawny-coloured surface of the equatoreal belt. The drawings I have made do not show any remarkably symmetrical forms; in several instances I had drawn nearly oval markings or turreted forms on the southern edge of the equatorial belt, but using the highest powers the night would bear, and watching for fitful intervals of the best definition, I always found these exceedingly regular forms were incorrect, and had to modify them: for this reason I rather distrust the drawing made on the 3rd of March. The markings on the dark belt, south of the equator, present forms similar to those we see at times in white cumulus clouds previous to a thunder-storm. I believe that could I have obtained clearer views of the planet, I should not have left these markings quite so regular as they now appear in the drawing. When favourably seen, such markings usually terminate in points or rugged edges towards the W. The light belts frequently incline at a considerable angle from the poles towards the equator of the planet. The belt shown on the drawing No. 4, made on May 5th, at 9.15 P.M., G. M. T., makes an angle of nearly 25° with the equatorial belt; a number of shorter markings, also, at about the same angle, stretch some distance into the tawny-coloured equatorial belt; these I at first drew of a turreted form, and only very close examination convinced me that they had the inclination I have now given to them. The darker belts have varied from dark warm or cool grey, to purple madder, or madder brown; but towards the poles of the planet the belts have been usually bluish grey, while close to the poles the blue colour has been very decided. During the month of May the colour of the equatorial belt had seemed fainter, but this is probably due to the planet being less favourably situated for observation.

I have made several observations of the spectrum of the planet, but though I have 12 inches of aperture, I do not find this sufficient to enable me to see more than the dark absorption bands in the red portion of the spectrum, with which most observers are now probably familiar. Though I cannot make out any differences in the appearance of the spectrum sufficiently marked to enable me to draw or describe them, yet I strongly suspect a change in the spectrum, which a larger aperture, giving more light, would enable me to bring out.

On the Masses of the Planets and the Parallax of the Sun.

By M. Le Verrier.*

The exact determination of the angle π , or the solar parallax is a matter of great interest to astronomers; it is the maximum angle under which an observer, supposed to be placed at the Sun's centre, would see the radius of the terrestrial globe.

* Translated from the *Comptes Rendus* for 1872, July 22, by W. T. Lynn, B.A., F.R.A.S.